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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,291	MORGAN ET AL.	
	Examiner	Art Unit	
	Chuc D Tran	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-7,9,10,12-18,26,27,30-38,40-48,57,58,60-70 and 72-74* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2-7,18,23,45-48 and 65-67* is/are allowed.

6)☒ Claim(s) *9,10,12,26,27,30-38,40-44,57,58,60-64 and 72-74* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/9/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 2-8, 11, 18-25, 28-30, 32-33, 49-56, 59-64 and 66-67 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

2. The indicated allowability of claims 9-10, 12-17, 26-27, 31, 34-38, 40-48, 57-58, 65, 68-70 and 72 are withdrawn in view of the newly discovered reference(s) to Belliveau et al. (USP. 4,962,687). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Belliveau et al (SP. 4,962,687).

Regarding claim 42, Belliveau et al disclose a method of illuminating a liquid, comprising acts of:

- illuminating the liquid with variable color radiation that is generated without requiring the use of a

color filter (Col. 8, Line 24) (Col. 10, Line 30) (Fig. 4); and

- remotely controlling at least a color of the variable color radiation (Col. 13, Line 60), wherein

- the remotely controlling the variable color radiation based on at least one interruption in power

supplied to at least one light source that generates the variable color radiation (Col. 14, Line 5).

Regarding claim 41, Belliveau et al disclose that remotely varying at least one of an intensity and the a color of the variable color radiation (Col. 13, Line 61).

Regarding claim 43, Belliveau et al disclose a method of illuminating a liquid, comprising acts of:

- illuminating the liquid with variable color radiation that is generated without requiring the use of a color filter (Col. 8, Line 24) (Col. 10, Line 30) (Fig. 4); and
- remotely controlling at least a color of the variable color radiation (Col. 13, Line 60); wherein
- remotely controlling the variable color radiation based on at least one detectable condition (Col. 8, Line 45).

Regarding claim 44, Belliveau et al disclose a method of illuminating a liquid, comprising acts of:

- illuminating the liquid with variable color radiation that is generated without requiring the use of a color filter (Fig. 4) (Col. 8, Line 24) (Col. 10, Line 30); and
- remotely controlling at least a color of the variable color radiation (Col. 13, Line 60); wherein
- remotely controlling the variable color radiation based on at least one audio signal (Col. 14, Line 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9-10, 12, 26-27, 30-38, 40, 57-58, 60-64, 68-70 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belliveau et al (USP. 4,962,687) in view of R.G.M.DE GARMO (USP. 3,192,379).

Regarding claim 9, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), wherein the at least one light source (16) includes at least one input (14) to receive at least one external signal, and wherein the at least one light source is adapted such that at least a color of the variable color radiation output is controlled based on the at least one external signal (Col. 3, Line 51), and wherein the at least one external signal is derived from a power source (12) that supplies power to the apparatus (Fig. 1), and wherein the at least one light source is adapted such that the variable color radiation output is controlled based on at least one interruption in the power supplied to the apparatus (Col. 5, Line 13). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to

modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 10, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), wherein the at least one light source (16) includes at least one input (14) to receive at least one external signal, and wherein the at least one light source is adapted such that at least a color of the variable color radiation output is controlled based on the at least one external signal (Col. 3, Line 51), and wherein the at least one external signal is derived from at least one sensor (124) adapted to output at least one detection signal in response to at least one detectable condition (Col. 8, Line 31), and wherein the at least one light source is adapted such that the variable color radiation output is controlled based on at least one detectable condition (Col. 9, Line 20). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 12, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely

controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), wherein the at least one light source (16) includes at least one input (14) to receive at least one external signal, and wherein the at least one light source is adapted such that at least a color of the variable color radiation output is controlled based on the at least one external signal (Col. 3, Line 51), and wherein the at least one external signal is derived from at least one sensor (124) adapted to output at least one detection signal in response to at least one detectable condition (Col. 8, Line 31), and wherein the at least one external signal is derived from at least one audio signal (Col. 5, Line 18), and wherein the at least one light source (16) is adapted such that the variable color radiation output is controlled based on the at least one audio signal (Abstract). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 26, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color

radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (76) (Fig. 2), coupled to the at least one processor (Fig. 2), to allow the user to remotely control at least one parameter associated with the variable color radiation output of the at least one light source (Col. 7, Line 1), wherein the at least one processor is responsive to operation of the at least one selector (Col. 7, Line 20), and wherein the at least one selector includes at least one of an adjustable dial (Col. 7, Line 2). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 27, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (76) (Fig. 2), coupled to the at least one processor (Fig. 2), to allow the user to remotely control at least one

parameter associated with the variable color radiation output of the at least one light source (Col. 7, Line 1), wherein the at least one processor is responsive to operation of the at least one selector (Col. 7, Line 20), and wherein the at least one selector includes at least one of keypad (12) (Fig. 1). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 30, Belliveau et al disclose that the at least one parameter includes at least one of an intensity of the variable color radiation (Abstract), the a color of the variable color radiation (Abstract), and at least one property of the at least one illumination program (Col. 6, Line 15), and wherein: the at least one remote user interface (12) is adapted such that the at least one selector allows the user to remotely control at least one of the intensity of the variable color radiation (Col. 6, Line 62), the color of the variable color radiation, and the at least one property of the illumination program (Col. 10, Line 29).

Regarding claim 31, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one

light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (76) (Fig. 2), coupled to the at least one processor (Fig. 2), to allow the user to remotely control at least one parameter associated with the variable color radiation output of the at least one light source (Col. 7, Line 1), wherein the at least one processor is responsive to operation of the at least one selector (Col. 7, Line 20), wherein at least one of the at least one light source (16) (Fig. 1) and the at least one remote user interface (12) comprises at least one storage device to store at least one illumination program (Col. 6, Line 65), and wherein the at least one parameter includes at least one of an intensity of the variable color radiation (Col. 6, Line 17), the color of the variable color radiation, and at least one property of the at least one illumination program (6, Line 17), and wherein the at least one remote user interface (12) is adapted such that the at least one selector allows the user to remotely control at least one of the intensity of the variable color radiation (Col. 7, Line 1) (Fig. 2), the color of the variable color radiation, and the at least one property of the illumination program, and wherein the at least one property of the illumination program includes an execution speed of the illumination program (Col. 6, Line 15), and wherein: the at least one remote user interface is adapted such that the at least one selector allows the user to remotely control the execution speed of the illumination program (Col. 5, line 5). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light

source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 32, Belliveau et al disclose that the at least one illumination program includes a plurality of illumination programs (Col. Col. 8, Line 24), wherein the at least one storage device stores the plurality of illumination programs (Col. 6, Line 65), and wherein: the at least one remote user interface (12) is adapted such that the at least one selector allows the user to remotely select a particular illumination program of the plurality of illumination programs (Col. 7, Line 1) (Fig. 2).

Regarding claim 33, Belliveau et al disclose that the at least one remote user interface includes at least one display screen (18) (Col. 7, Line 1), coupled to the processor (70) (Fig. 2), to indicate to the user a status of at least one parameter associated with the variable color radiation output of the at least one light source (Abstract).

Regarding claim 34, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further includes at least one communication port (14) to output at least one control signal (Col. 3, line 62), and wherein the apparatus further comprises: at least one controller (12),

coupled to the at least one light source (16) (Fig. 1) and to the at least one communication port, to receive the at least one control signal from the at least one remote user interface and to control the variable color radiation output based on the at least one control signal (Col. 3, line 51). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 35, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs set forth in the claims except the at least one communication port is adapted to support transport of the at least one control signal to the at least one controller via at least one of a wire link and a fiber optic. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the fiber optic wire link in order to vary color radiation output of the light source, since it matter of obvious of design choice.

Regarding claim 36, Belliveau et al disclose that the at least one communication port is adapted to support transport of the at least one control signal to the at least one controller via a wireless link (Fig. 1).

Regarding claim 37, Belliveau et al disclose that at least one storage device (72, 74) (Fig. 2), coupled to at least one of the at least one remote user interface (18) (Fig. 2) and the at least

one controller (70), to store at least one illumination program (Col. 6, Line 65) , wherein the at least one controller is adapted to execute the at least one illumination program (Col. 6, Line 66), based on the at least one control signal output by the at least one remote user interface, so as to control the radiation output by the at least one light source (Abstrac).

Regarding claim 38, Belliveau et al disclose that at least one illumination program includes a plurality of illumination programs (Col. 6, Line 17), wherein the at least one storage device stores the plurality of illumination programs (Fig. 2), and wherein: the at least one remote user interface (12) is adapted to allow a user to remotely select a particular illumination program of the plurality of illumination programs and to output the at least one control signal so as to indicate the selected particular illumination program (Col. 6, line 63); and the at least one controller (70) is adapted to execute the selected particular illumination program based on the at least one control signal (Col. 6, Line 65).

Regarding claims 40 and 74, Belliveau disclose a method of illuminating the liquid set forth in the claims except the liquid in the one of the pool, fountain and spa. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 57, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely

controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (76) (Fig. 2), coupled to the at least one processor (Fig. 2), to allow the user to remotely control at least one parameter associated with the variable color radiation output of the at least one light source (Col. 7, Line 1), wherein the at least one processor is responsive to operation of the at least one selector (Col. 7, Line 20), and wherein the at least one selector includes at least one of an adjustable dial (Col. 7, Line 2). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 58, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12) (Fig. 1), coupled to the at least one light source (16) (Fig. 1), to allow a user to remotely control at least a color of the variable color

radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (76) (Fig. 2), coupled to the at least one processor (Fig. 2), to allow the user to remotely control at least one parameter associated with the variable color radiation output of the at least one light source (Col. 7, Line 1), wherein the at least one processor is responsive to operation of the at least one selector (Col. 7, Line 20), and wherein the at least one selector includes at least one of a key pad (Col. 7, Line 2) (Fig. 1). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 60, Belliveau et al disclose that at least one parameter includes at least one of an intensity of the variable radiation output of the at least one light source and a color of the variable radiation output of the at least one light source (Fig. 1) (Abstract), and wherein the at least one remote user interface (12) is adapted such that at least one selector of the at least two selectors (Fig. 1) allows the a user to remotely control at least one of the intensity and the color of the variable radiation output of the at least one light source (Col. 7, Line 1).

Regarding claim 61, Belliveau et al disclose that at least one remote user interface includes at least one processor (70) (Fig. 2), responsive to the at least two selectors, to control the variable radiation output of the at least one light source (Col. 6, Line 65).

Regarding claim 62, Belliveau et al disclose that at least one of the at least one light source (16) and the at least one remote user interface (12) includes at least one storage device (72, 74) (Fig. 2) to store at least one illumination program, wherein the at least one remote user interface is adapted to cause the execution of the at least one illumination program, in response to at least one selector of the at least two selectors, so as to control the variable color radiation output by the at least one light source (Col. 6, Line 65) (Col. 7, Line 1).

Regarding claim 63, Belliveau et al disclose that at least one remote user interface includes the at least one storage device, and wherein the at least one storage device is coupled to the at least one processor.

Regarding claim 64, Belliveau et al disclose that at least one parameter includes at least one of an intensity of the variable radiation output (Fig. 1), a color of the variable radiation output (14) (Fig. 1), and at least one property of the illumination program (Fig. 1), and wherein: the at least one remote user interface (12) is adapted such that at least one selector of the at least two selectors allows the user to control at least one of the intensity of the variable radiation output (Col. 7, Line 10, the color of the variable radiation output, and the at least one property of the illumination program (Abstract).

Regarding claim 68, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid comprising at least two

selectors to allow a user to remotely control at least one parameter associated with the variable color radiation generated by the at least one light source (Fig. 1&2) (Abstract), wherein the at least one remote user interface (12) includes at least one processor (70) responsive to the at least two selectors (18) to control the variable radiation output of the at least one light source (Col. 7, Line 1). And wherein the at least one remote user interface includes at least one display screen (18), coupled to the at least one processor (70) (Fig. 2), to indicate to the user a status of at least one parameter associated with the variable radiation output of the at least one light source (Col. 7, Line 1) (Abstract). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 69, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid comprising at least two selectors to allow a user to remotely control at least one parameter associated with the variable color radiation generated by the at least one light source (Fig. 1&2) (Abstract), wherein the at least one remote user interface (12) includes at least one processor (70) responsive to the at least two selectors (18) to control the variable radiation output of the at least one light source (Col. 7,

Line 1). And wherein the at least one remote user interface includes at least one communication port (14) is adapted to support transport of the at least one control signal to the at least one light source (16) (Fig. 1). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool by fiber optic wire link to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37) by fiber optic wire link, since its matter of obvious of design choice.

Regarding claim 70, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid comprising at least two selectors to allow a user to remotely control at least one parameter associated with the variable color radiation generated by the at least one light source (Fig. 1&2) (Abstract), wherein the at least one remote user interface (12) includes at least one processor (70) responsive to the at least two selectors (18) to control the variable radiation output of the at least one light source (Col. 7, Line 1). And wherein the at least one remote user interface includes at least one communication port (14) is adapted to support transport of the at least one control signal to the at least one light source (16) (Fig. 1) via a wireless link (Fig. 1) (Col. 3, line 51). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid

contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 72, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), and at least one remote user interface (12), coupled to the at least one light source (16), to allow a user to remotely control at least a color of the variable color radiation output of the at least one light source (Abstract), wherein the at least one remote user interface further comprises at least one processor (70) (Fig. 2) and at least one selector (18), coupled to the at least one processor 970) (Fig. 2), to allow the user to remotely control at least one parameter associated with the variable color radiation output of the at least one light source (Col. 4, Line 15), wherein the at least one processor is responsive to operation of the at least one selector (Col. 6, Line 65), and wherein the at least one selector includes at least one switch (Col. 6, Line 39), and wherein the at least one switch (20) (Fig. 1) is configured to selectively provide power to the apparatus (Col. 3, Line 58) , and wherein the at least one light source is adapted such that the variable color radiation output is controlled based on at least one interruption in the power supplied to the apparatus (Col. 4, Line 15). However, Belliveau et al is silent on the limitation of

the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Regarding claim 73, Belliveau et al disclose an apparatus for remotely controlled illumination of LEDs comprising at least one light source adapted to generate a remotely controllable variable color radiation output to illuminate the liquid without requiring the use of a color filter (Fig. 2), wherein the at least one light source (16) (Fig. 1) includes at least one input to receive at least one external signal (14), and wherein the at least one light source is adapted such that at least a color of the variable color radiation output is controlled based on the at least one external signal (Col. 3, Line 51), and wherein the at least one external signal is derived from at least one sensor (124) adapted to output at least one detection signal in response to at least one detectable condition (Col. 8, Line 31), and wherein the at least one light source is adapted such that the variable color radiation output is controlled based on at least one detectable condition (Col. 8, Line 40). However, Belliveau et al is silent on the limitation of the light source adapted to be supported by the pool to illuminate a liquid contained in the pool. R. G. M. De Garmo disclose swimming pool lighting source comprising a pool (12) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belliveau et al by installing the light source to the pool as taught by R. G. M. De Garmo. The

ordinary artisan would have been motivated to modify Belliveau et al in the manner described above for generating the remotely controllable variable color radiation output to illuminate the liquid in the pool (12) (Col. 2, Line 37).

Allowable Subject Matter

6. Claims2-7, 13-18, 45-48 and 65-67 are allowed.

7. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to appreciate the advantage offered by remotely for controlled illumination of liquid with the following distinctive features such as set by all of the independent claims. In particular, the art of record fails to teach or fairly suggest constructing a data network that provides the information signal intended for the light source, wherein the at least one selector allows the user to control the execution speed of the illumination program posses all of the distinctive features such as defined by independent claims 13, 45 and 65 to make the LEDs based with multi color light source.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of relevant prior art

Prior art Taylor et al (USP. 5,769,527) disclose computer controlled lighting system.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
June 14, 2004